

1. A multipack contains  $b$  packs of barbecue flavour crisps,  $c$  packs of cheese and onion flavour crisps and  $v$  packs of salt and vinegar crisps.

The total number of packs,  $P$ , can be worked out using the formula  $P = b + c + v$

Work out the value of  $P$  when  $b = 7$ ,  $c = 7$  and  $v = 4$

2. The formula to work out the total number of chairs,  $c$ , in  $r$  rows of 7 chairs is

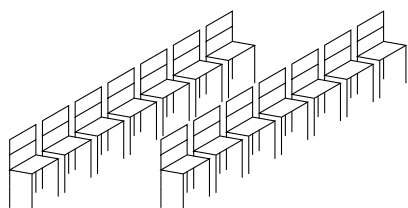
$$c = 7r$$

↑  
×

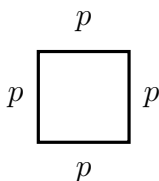
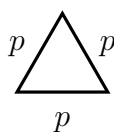
Work out the value of  $c$  when  $r = 2$

**F.Y.I.** Using the 7's row of the times table grid: is much faster than drawing and counting.

×	2	3	4	5	6	7	8	9
7	14	21	28	35	42	49	56	63



3. Here are some shapes made from panel pins.



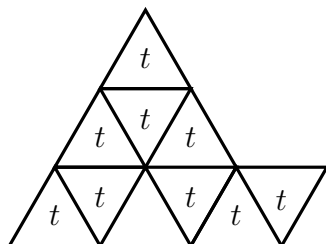
$p$  is the length of each panel pin

$p = 20$  mm

Complete this table

	perimeter (in terms of $p$ )	perimeter (mm)
triangle	$3p$	60
square	$4p$	

4. Here is a octagon made from tiles.



$t$  is the area of each tile

$t = 8$  cm<sup>2</sup>

Write down the area of the octagon

(i) in terms of  $t$  .....

(ii) in cm<sup>2</sup> ..... cm<sup>2</sup>

5. (a)  $u = 4t$

$t = 9$

Find the value of  $u$ 

(b)  $A = 3w$

Work out the value of  $A$  when  $w = 5$ 

(c)  $x = 6$

Work out the value of  $3x$ 

6. (a)  $p = 3$

$q = 8$

Work out the value of  $7p + 2q$ 

(b)  $y = 7n + 3d$

$n = 2$

$d = 5$

Work out the value of  $y$ 

(c)  $x = 30$

$y = 9$

$P = 2x + 3y$

Find the value of  $P$ 

7. (a)  $n = 4$

$d = -5$

Work out the value of  $7n + 3d$ 

(b)  $x = 5$

$y = 3$

$P = 8x - 4y$

Find the value of  $P$ 

(c)  $p = -5$

$q = 3$

$W = 7p + 2q$

Find the value of  $W$ 

8.  $A = 3w - 4$

Work out the value of  $A$  when  $w = 5$

9. (a) Here is a way to convert oven temperatures from a gas mark into °F.

$$\boxed{\text{Temperature } ^\circ\text{F}} = \boxed{\text{Gas mark} \times 25} + \boxed{250}$$

Fletcher needs to convert gas mark 5 into °F.

Write down this temperature in °F.

- (b) You can use this rule to work out the total wage of a delivery driver.

£8 per hour plus tips

Onile works as a delivery driver for 9 hours and got £17 tips.

Work out Onile's total wage.

- (c) Here is the price list for motor racing experience laps.

Moto Experience	
First lap and training	£125
All other laps	£35

Caz has booked and paid for 5 laps.

Work out the total cost of the 5 laps.